

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

Application of the Milwaukee Water Works
for Authority to Increase Water Rates

Docket 3720-WR-108

**DIRECT TESTIMONY OF JOHN WRIGHT
ON BEHALF OF MILWAUKEE WATER WORKS**

1 **Q. Please state your name and business address.**

2 A. John J. Wright, 12385 East Arapahoe Road, Tower II, Suite 600, Centennial, CO, 80112.

3 **Q. In what capacity are you appearing as a witness?**

4 A. I am a Senior Consultant with Raftelis Financial Consultants, Inc.

5 **Q. Has Milwaukee Water Works (MWW) authorized you to sponsor testimony on its**
6 **behalf in this proceeding?**

7 A. Yes.

8 **Q. Please describe your education and professional credentials.**

9 A. I have a Master of Science in Finance from the University of Colorado at Denver and a
10 Bachelor of Science in Accounting from Metropolitan State University of Denver. I am a
11 Certified Public Accountant in the State of Colorado and the State of Missouri.

12 **Q. Can you provide a brief description of your work experience?**

13 A. I have provided, as Ex-MWW-Wright-1, a copy of my curriculum vitae which
14 demonstrates my professional experience.

15 **Q. Are you a member of any professional organizations?**

1 A. Yes. I am a member of the American Water Works Association (AWWA) and the Water
2 Environment Federation (WEF) and currently serve on the Utility Management
3 Committee.

4 **Q. What is the purpose of your testimony?**

5 A. The purpose of my testimony is provide an overview of the cost of service study filed by
6 MWW as part of its rate increase application.

7 **Q. Are you sponsoring any exhibits with your testimony?**

8 A. Yes. Based on my overall responsibility for the preparation of MWW's cost of service
9 study in this rate case proceeding, I am sponsoring Ex.-MWW-Wright-2 (PSC
10 REF#:205539), which is MWW's revised Cost of Service Study, filed on ERF on May
11 30, 2014.

12 **Q. What rate of return is MWW requesting?**

13 A. The composite rate of return on net investment rate base requested by MWW is 5.38%.
14 When applied to the test year net investment rate base of \$336,130,621, this composite
15 rate of return yields net operating income of \$18,068,552. The retail component of the
16 composite rate of return is 5.25% and the wholesale component of the composite rate of
17 return is 6.25%.

18 **Q. What is the conceptual basis for MWW's requested 100 basis point differential
19 between the retail and wholesale rates of return?**

20 A. MWW's request for a 100 basis point differential is justified is for three primary reasons:
21 - MWW has historically made investments in water utility infrastructure to
22 provide service to wholesale customers located outside the jurisdictional boundaries of
23 the City of Milwaukee. The use of a 100 basis point differential compensates MWW's

1 inside city customers, who are both ratepayers and owners of the MWW system, for the
2 investments they have made to provide service to outside city wholesale customers.

3 - The wholesale water supply contracts between MWW and its wholesale
4 customers are not perpetual in nature. For this reason, there is a risk that MWW's
5 wholesale customers will seek to obtain treated water from other sources. Depending on
6 the wholesale customer in question, this could result in MWW incurring a substantial loss
7 of revenue and potentially stranded infrastructure. MWW's wholesale water supply
8 contracts also guarantee certain levels of water availability to each wholesale customer,
9 regardless of whether it is fully utilized. MWW can only charge wholesale customers
10 based on their actual water demand, not the guaranteed amount of capacity MWW is
11 contractually obligated to provide. The 100 basis point differential allows MWW to be
12 compensated for these risks associated with providing wholesale service.

13 - The Commission previously found reasonable a 100 basis point differential for
14 MWW in its last rate case (Docket No. 3720-WR-107). As noted by the Commission in
15 its Final Decision (PSC REF #:144469) at page 9, the:

16 "American Water Works Association supports a differential return where inside
17 city owners provide service to outside city non-owners, and the Commission has
18 approved differential rates for other utilities."

19 Given MWW's investment in water utility infrastructure to serve outside city
20 customers coupled with the potential risk of revenue loss and stranded capacity, the
21 continued use of a 100 basis point differential remains appropriate.

22 **Q. Describe the cost allocation methodology used by MWW in its cost of service study.**

1 A. MWW's cost of service study uses of the base-extra capacity cost allocation methodology
2 as generally described in Chapters III.1 and III.2 of AWWA Manual M1. This is the
3 same cost allocation methodology used in the cost of service study prepared by the PSC
4 staff, and adopted by the Commission in MWW's last rate case (Docket No. 3720-WR-
5 107).

6 **Q. How do MWW's proposed cost allocations differ from those used by the PSC staff**
7 **in MWW's last rate case?**

8 A. In Docket No. 3720-WR-107, the maximum day and maximum hour customer class
9 demand ratios used by the PSC staff were not based on a contemporary analysis of actual
10 MWW customer water consumption characteristics. In the cost of service study in this
11 current rate case, MWW has allocated costs between customer classes using maximum
12 day and maximum hour demand ratios that are based on a contemporary analysis of
13 actual MWW customer water consumption characteristics. A discussion of the derivation
14 of the customer class demand ratios used in the cost of service study is provided in the
15 Direct Testimony of MWW witnesses Mr. Erik Granum and Ms. Christine Cramer.

16 **Q. In what other ways do MWW's cost allocations differ from those made by the PSC**
17 **staff in MWW's last rate case?**

18 A. As discussed later in my testimony, other cost allocation revisions made by MWW
19 include the modified allocation of:

20 - Utility financed water mains (Account #343) between the transmission and
21 distribution functions.

22 - Total utility mains (Account #343) between the transmission and distribution
23 functions.

1 - Depreciation expense for utility financed mains (Account #343) between the
2 transmission and distribution functions.

3 - Electric power costs (fuel or power purchased for production, Account #623) to
4 system cost parameters.

5 **Q. Does the method used to determine system demand ratios differ from that used in**
6 **MWW's last rate case?**

7 A. No. The Commission-adopted cost of service study in Docket No. 3720-WR-107
8 featured system demand ratios calculated using a six-year average. The system demand
9 ratios used in MWW's cost of service study are also based on a six-year average (2007 -
10 2012).

11 **Q. Does the method used to determine the public fire protection revenue requirement**
12 **for each customer class differ from that used in MWW's last rate case?**

13 A. No. In its Final Decision in Docket No. 3720-WR-107, the Commission adopted a
14 population-based methodology to determine the public fire flows and associated revenue
15 requirement for each customer class receiving public fire protection service. MWW has
16 continued to use this same methodology.

17 **Q. Describe the revised methodology used by MWW to allocate utility financed water**
18 **mains (Account #343) between the transmission and distribution functions.**

19 A. The Commission-adopted cost of service study in Docket No. 3720-WR-107 allocated
20 the value of utility financed water mains between the transmission and distribution
21 functions based on original cost. MWW has allocated the value of utility financed water
22 mains between the transmission and distribution function based on "inch-feet" (main
23 length x main diameter).

1 **Q. Why does MWW believe that inch feet is a more appropriate basis for the allocation**
2 **of water mains between the transmission and distribution functions?**

3 A. Inch-feet is a quantitative measurement of the physical attributes of the water mains used
4 to meet the demands that customers place on the MWW system. The use of inch-feet as a
5 basis for allocating MWW's investment in water mains between the transmission and
6 distribution functions better correlates this investment to the customer demands that
7 specific sized mains are required to meet. MWW utilizes an installed inventory of
8 approximately 46.1 million inch-feet of mains with a diameter 12" or smaller to meet the
9 base and maximum hour demands of distribution customers. MWW also utilizes an
10 installed inventory of approximately 68.5 million inch-feet of water mains with a
11 diameter 16" or larger to meet the system-wide base, maximum day and maximum hour
12 demands. Allocating MWW's investment in utility financed mains based on quantitative
13 measures related to main size (46.1 and 68.5 million inch-feet) allows this investment to
14 be allocated in a manner that is directly correlated to customer demand.

15 In addition, the purpose of allocating utility-financed mains is to appropriately
16 allocate depreciation and return-on-investment which are used to provide funding for the
17 rehabilitation and replacement of main infrastructure. Allocating utility financed mains
18 based on an inch-feet basis reflects this purpose and better corresponds with the cost of
19 the eventual replacement of main infrastructure.

20 **Q. Describe the revised methodology used by MWW to allocate total utility water**
21 **mains (Account #343) between the transmission and distribution functions.**

22 A. The Commission-adopted cost of service study in Docket No. 3720-WR-107 determined
23 the value of total utility transmission and distribution mains using a two-step process.

1 The first step involved allocating the value of utility financed plant between the
2 transmission and distribution functions based on original cost as discussed above. The
3 second step involved allocating the value of contributed water mains between the
4 transmission and distribution functions based on the actual water main-related
5 contributions in aid of construction received by MWW during the period 2003 - 2009.

6 For the reasons discussed above, MWW believes that inch-feet is a superior basis
7 for the allocation of utility financed mains to the transmission and distribution functions
8 than original cost. Therefore, MWW has elected to determine the value of total utility
9 transmission and distribution mains using a revised methodology in which inch-feet is the
10 starting point for the allocation of utility financed water mains. MWW then allocates the
11 value of contributed water mains between the transmission and distribution functions
12 based on the actual water main-related contributions in aid of construction received by
13 MWW during the period 2003 - 2012.

14 **Q. Describe the revised methodology used by MWW to allocate the depreciation**
15 **expense for utility financed mains (Account #343) between the transmission and**
16 **distribution functions.**

17 A. The Commission-adopted cost of service study in Docket No. 3720-WR-107 allocated
18 water main depreciation expense between the transmission and distribution functions
19 based on original cost. In order to be fully aligned with MWW's recommended
20 allocation methodology for utility-financed mains, MWW has also allocated depreciation
21 expense to the transmission and distribution functions based on inch-feet.

22 **Q. Describe the revised methodology used by MWW to allocate electric power costs**
23 **(fuel or power purchased for production, Account #623) to system cost parameters.**

1 A. The Commission-adopted cost of service study in Docket No. 3720-WR-107 allocated
2 82.30% of electric power costs to the system base demand function and the remaining
3 17.70% to the maximum day demand function. MWW has revised this allocation
4 because the electric power costs incurred by MWW are primarily-related to maintaining
5 system pressures during period of base load demand (per kilowatt hour electric usage
6 charges) or serving maximum hour demand (per KW electric demand charges). As a
7 result, MWW's proposed allocations for electric power costs are based on the system
8 demand ratios of 64.95% for base demand and 35.05% for maximum hour capacity
9 demand.

10 **Q. Does this conclude your direct testimony?**

11 A. Yes.